

AMENDMENTS TO THE CLAIMS

1-30 (Canceled).

31 (Previously presented). A biocompatible material comprising

a mixture of a protein solution and a polymer solution including a derivative of a hydrophilic polymer with a functionality of at least three, wherein, upon mixing, the protein solution and the polymer solution cross-link to form a non-liquid, three-dimensional network that degrades over time back to a liquid form, the polymer including a degradation control region selected to achieve a desired degradation period,

wherein the polymer solution comprises at least one hybrid protein.

32 (Previously presented). A biocompatible material comprising

a mixture of a protein solution and a polymer solution including a derivative of a hydrophilic polymer with a functionality of at least three, wherein, upon mixing, the protein solution and the polymer solution cross-link to form a non-liquid, three-dimensional network that degrades over time back to a liquid form, the polymer including a degradation control region selected to achieve a desired degradation period,

wherein the polymer solution comprises at least one synthetic amino acid sequence.

33-108 (Canceled).

109 (Original). A biocompatible material comprising a mixture of a protein solution and a polymer solution which, upon mixing, cross-link to form a non-liquid, three-dimensional network, and an agent that undergoes color change in response to cross-linking of the mixture.

110 (Original). A material according to claim 109

wherein the agent undergoes color change in response to change in pH.

111 (Original). A material according to claim 109

wherein the agent exhibits a first color when the mixture is in a liquid state and a second color, different than the first color, when the mixture forms the non-liquid, three-dimensional network.

112 (Original). A material according to claim 109

wherein the agent exhibits a first color when the mixture is in transition between a liquid state and the non-liquid, three dimensional network, and a second color, different than the first color, when the mixture forms the non-liquid, three-dimensional network.

113 (Original). A material according to claim 109 wherein the agent includes xylene blue.

114 (Original). A material according to claim 109 wherein the agent includes phenol red.

115 (Original). A material according to claim 109 wherein the agent includes a mixture of xylene blue and phenol red.

116 (Original). A material according to claim 109 wherein the agent includes phenolphthalein.

117 (Original). A material according to claim 109 wherein the agent includes o-cresolphthalein.

118 (Original). A material according to claim 109 wherein the agent includes bromothymol blue.

119 (Original). A material according to claim 109 wherein the agent includes a mixture of bromothymol blue and phenolphthalein or o-cresolphthalein.

120 (Previously presented). A biocompatible material comprising a mixture of a protein solution and a polymer solution including a derivative of a hydrophilic polymer with a functionality of at least three, wherein, upon mixing, the protein solution and the polymer solution cross-link over time to form a non-liquid, three-dimensional network, the polymer including a cross-linking group selected to achieve a desired cross-linking period, wherein the polymer solution comprises at least one hybrid protein.

121 (Previously presented). A biocompatible material comprising a mixture of a protein solution and a polymer solution including a derivative of a hydrophilic polymer with a functionality of at least three, wherein, upon mixing, the protein solution and the polymer solution cross-link over time to form a non-liquid, three-dimensional network, the polymer including a cross-linking group selected to achieve a desired cross-linking period, wherein the polymer solution comprises at least one synthetic amino acid sequence.